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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/732,945	12/11/2003	Bao-Chi Peng	39524.9100	7260

7590 10/28/2005

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EXAMINER	
RAMPURIA, SHARAD K	
ART UNIT	**PAPER NUMBER**
2688	

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/732,945	PENG, BAO-CHI	
	Examiner	Art Unit	
	Sharad Rampuria	2688	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

I. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

II. Claims 1-5 & 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al. [US 20030069048] in view of Yuen et al. [US 5991645].

As per claim 1, Liu teaches:

A mobile device (1; Fig.1) with a selective connecting function. (Pg.3; 0029) the mobile device comprising:

A processor, including: an auto-connecting module for executing an auto-connecting function; a manual-connecting module for executing a manual-connecting function; (Pg.3; 0029) and

Liu doesn't teach explicitly, a detecting device for providing a status signal of a using status of the earphone and a determining module, for controlling the mobile device to selectively execute the auto-connecting function and the manual-connecting function responsive to the status signal. However, Yuen teaches in an analogous art, that an earphone (146; Fig.3) including a detecting device (115; Fig.3) for providing a status signal of a using status of the

earphone; (Col.9; 40-50) and a determining module (110; Fig.3), responsive to the status signal, for controlling the mobile device to selectively controlling one or more operating parameters. (Col.9; 51-65) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Liu including the detecting device for providing a status signal of a using status of the earphone and the determining module, for controlling the mobile device to selectively execute the auto-connecting function and the manual-connecting function responsive to the status signal in order to improve the quality of service providing automated activation of one or more operating parameter based on headset connection.

As per claim 2, Liu teaches all the particulars of the claim except the detecting device connects to the connecting device, and controls the status signal selectively being in a low level and a high level. However, Yuen teaches in an analogous art, that the mobile device of claim 1, the mobile device further comprising: a connecting device for connecting to the earphone, the connecting device having a first terminal; a transmission line, one terminal of the transmission line electrically connecting to the processor for transmitting the status signal; (Col.9; 51-65)

A voltage source (126; Fig. 5); and a resistor (129; Fig. 5), one terminal of the resistor connecting to the voltage source, another terminal of the resistor connecting to the first terminal of the connecting device and another terminal of the transmission line; (Col.9; 66-Col. 10; 10) wherein the detecting device connects to the connecting device, and controls the status signal selectively being in a low level and a high level. (Col.11; 23-41) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the detecting device connects to the connecting device, and controls the status signal selectively being in a low level

and a high level in order to improve the quality of service provided by telephone systems in which the presence of a representative or operator at a workstation impacts the quality of service, it is desirable that logging on and logging off be automated.

As per claim 3, Liu teaches all the particulars of the claim except one terminal of the switch connecting to ground, another terminal of the switch connecting to the first terminal of the connecting device. However, Yuen teaches in an analogous art, that the mobile device of claim 2, wherein the detecting device includes: a switch, one terminal of the switch connecting to ground, another terminal of the switch connecting to the first terminal of the connecting device, and a control unit for controlling the switch. (Col.9; 18-39) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include one terminal of the switch connecting to ground, another terminal of the switch connecting to the first terminal of the connecting device in order to improve the quality of service provided by telephone systems in which the presence of a representative or operator at a workstation impacts the quality of service, it is desirable that logging on and logging off be automated.

As per claim 4, Liu teaches all the particulars of the claim except the control unit includes a mechanical switch, and when the earphone is in a depressed state, the mechanical switch turns off the switch. However, Yuen teaches in an analogous art, that the mobile device of claim 3, wherein the control unit includes a mechanical switch, and when the earphone is in a depressed state, the mechanical switch turns off the switch. (190; Fig. 5, Col.8; 50-62) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the

control unit includes a mechanical switch, and when the earphone is in a depressed state, the mechanical switch turns off the switch in order to improve the quality of service provided by telephone systems in which the presence of a representative or operator at a workstation impacts the quality of service, it is desirable that logging on and logging off be automated.

As per claim 5, Liu teaches all the particulars of the claim except the control unit turns on the switch when the earphone is in an operation state. However, Yuen teaches in an analogous art, that the mobile device of claim 3, wherein the control unit turns on the switch when the earphone is in an operation state. (Col.9; 51-65) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the control unit turns on the switch when the earphone is in an operation state in order to improve the quality of service provided by telephone systems in which the presence of a representative or operator at a workstation impacts the quality of service, it is desirable that logging on and logging off be automated.

As per claim 10, Liu teaches all the particulars of the claim except the control unit includes an infrared ray transmitting device and an infrared ray receiving device. However, Yuen teaches in an analogous art, that the mobile device of claim 3, wherein the control unit includes an infrared ray transmitting device and an infrared ray receiving device, when the infrared ray receiving device receives no infrared ray signal, the control unit turns on the switch. (Col.7; 32-37) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the control unit includes an infrared ray transmitting device and an infrared ray receiving device in order to improve the quality of service provided by telephone systems in

which the presence of a representative or operator at a workstation impacts the quality of service, it is desirable that logging on and logging off be automated.

As per claim 11, Liu teaches all the particulars of the claim except the connecting device includes an earphone socket. However, Yuen teaches in an analogous art, that the mobile device of claim 2, wherein the connecting device includes an earphone socket. (Col.4; 44-57) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the connecting device includes an earphone socket in order to improve the quality of service provided by telephone systems in which the presence of a representative or operator at a workstation impacts the quality of service, it is desirable that logging on and logging off be automated.

As per claim 12, Liu teaches:

A mobile device (1; Fig.1) with a selective connecting function. (Pg.3; 0029) the mobile device comprising:

A processor electrically connecting to another terminal of the transmission line and receiving the status signal from the transmission line, the processor including: an auto-connecting module for executing an auto connecting function; a manual-connecting module, for executing a manual-connecting function; and; (Pg.3; 0029) and

Liu doesn't teach explicitly, a detecting device for providing a status signal of a using status of the earphone and a determining module, for controlling the mobile device to selectively execute the auto-connecting function and the manual-connecting function responsive to the

status signal. However, Yuen teaches in an analogous art, that an earphone (146; Fig.3) including a detecting device for providing a status signal according to a status of the earphone; an earphone socket for connecting to the earphone, (Col.7; 8-17)

The earphone socket having a first terminal; a transmission line, for transmitting the status signal; (Col.9; 51-65)

A voltage source (126; Fig. 5); a resistor (129; Fig. 5), one terminal of the resistor connecting to the voltage source, another terminal of the resistor connecting to the first terminal of the earphone socket and one terminal of the transmission line; (Col.9; 66-Col. 10; 10) and

A determining module, responsive to the status signal, for controlling the mobile device to selectively controlling one or more operating parameters. (Col.9; 51-65) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Liu including the detecting device for providing a status signal of a using status of the earphone and the determining module, for controlling the mobile device to selectively execute the auto-connecting function and the manual-connecting function responsive to the status signal in order to improve the quality of service providing automated activation of one or more operating parameter based on headset connection.

As per claim 13, Liu teaches all the particulars of the claim except one terminal of the switch connecting to ground, another terminal of the switch connecting to the first terminal of the connecting device. However, Yuen teaches in an analogous art, that mobile phone of claim 12, wherein the detecting device includes: a switch, one terminal of the switch connecting to ground, another terminal of the switch connecting to the first terminal of the connecting device, and a

control unit for controlling the switch. (Col.9; 18-39) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include one terminal of the switch connecting to ground, another terminal of the switch connecting to the first terminal of the connecting device in order to improve the quality of service provided by telephone systems in which the presence of a representative or operator at a workstation impacts the quality of service, it is desirable that logging on and logging off be automated.

As per claim 14, Liu teaches all the particulars of the claim except the control unit includes a mechanical switch, and when the earphone is in a depressed state, the mechanical switch turns off the switch. However, Yuen teaches in an analogous art, that the mobile phone of claim 13, wherein the control unit includes a mechanical switch, and when the earphone is in a depressed state, the mechanical switch turns off the switch. (190; Fig. 5, Col.8; 50-62) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the control unit includes a mechanical switch, and when the earphone is in a depressed state, the mechanical switch turns off the switch in order to improve the quality of service provided by telephone systems in which the presence of a representative or operator at a workstation impacts the quality of service, it is desirable that logging on and logging off be automated.

As per claim 15, Liu teaches all the particulars of the claim except the control unit turns on the switch when the earphone is in an operation state. However, Yuen teaches in an analogous art, that the mobile phone of claim 13, wherein the control unit turns on the switch when the earphone is in an operation state. (Col.9; 51-65) Therefore, it would have been obvious to one of

ordinary skill in the art at the time of invention to include the control unit turns on the switch when the earphone is in an operation state in order to improve the quality of service provided by telephone systems in which the presence of a representative or operator at a workstation impacts the quality of service, it is desirable that logging on and logging off be automated.

III. Claims 6 &16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu in view of Yuen as applied to claim above and further in view of Lewis [US 20040033820].

As per claim 6, the above combination teaches all the particulars of the claim except the earphone further includes a hook and a pad rotatably connecting with the hook. However, Lewis teaches in an analogous art, that the mobile device of claim 3, wherein the earphone further includes a hook and a pad rotatably connecting with the hook, when the hook clips an ear and rotates relatively to the pad, the control unit switch makes the earphone in the operation state. (Pg.4; 0081) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the earphone further includes a hook and a pad rotatably connecting with the hook in order to provide a hands-free kit for mobile radio.

As per claim 16, the above combination teaches all the particulars of the claim except the earphone further includes a hook and a pad rotatably connecting with the hook. However, Lewis teaches in an analogous art, that the mobile phone of claim 13, wherein the earphone further includes a hook and a pad rotatably connecting with the hook, when the hook clips an ear and rotates relatively to the pad, the control unit switch makes the earphone in the operation state.

(Pg.4; 0081) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the earphone further includes a hook and a pad rotatably connecting with the hook in order to provide a hands-free kit for mobile radio.

IV. Claims 7 & 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu in view of Yuen as applied to claim above and further in view of Yamato et al. [US 20040204161].

As per claim 7, the above combination teaches all the particulars of the claim except a pressure sensor. However, Yamato teaches in an analogous art, that the mobile device of claim 3, wherein the control unit includes a pressure sensor, when the earphone is placed on an ear to press the pressure sensor, the control unit turns on the switch. (Pg.6; 0088) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a pressure sensor in order to provide a hands-free unit for portable telephone system.

As per claim 17, the above combination teaches all the particulars of the claim except a pressure sensor. However, Yamato teaches in an analogous art, that the mobile phone of claim 13, wherein the control unit includes a pressure sensor, when the earphone is placed on an ear to press the pressure sensor, the control unit turns on the switch. (Pg.6; 0088) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a pressure sensor in order to provide a hands-free unit for portable telephone system.

V. Claims 8 & 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu in view of Yuen as applied to claim above and further in view of Lester et al. [US 6002763].

As per claim 8, the above combination teaches all the particulars of the claim except a temperature sensor. However, Lester teaches in an analogous art, that the mobile device of claim 3, wherein the control unit includes a first temperature sensor for measuring a first temperature and a second temperature sensor for measuring a second temperature, the control unit turns on the switch when the first temperature is higher than the second temperature. (Col.4; 8-15) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a temperature sensor in order to provide a hands-free kit for mobile radio.

As per claim 18, the above combination teaches all the particulars of the claim except a temperature sensor. However, Lester teaches in an analogous art, that the mobile phone of claim 13, wherein the control unit includes a first temperature sensor for measuring a first temperature and a second temperature sensor for measuring a second temperature, the control unit turns on the switch when the first temperature is higher than the second temperature. (Col.4; 8-15) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a temperature sensor in order to provide a hands-free kit for mobile radio.

VI. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liu in view of Yuen as applied to claim above and further in view of Mooney et al. [US 20020098878].

As per claim 9, the above combination teaches all the particulars of the claim except an ultrasonic transmitting device. However, Mooney teaches in an analogous art, that the mobile device of claim 3, wherein the control unit includes an ultrasonic transmitting device and an ultrasonic receiving device, when the ultrasonic receiving device receives an ultrasonic signal, the control unit turns on the switch. (Pg.2; 0019) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include an ultrasonic transmitting device in order to provide a system of switching between two different sources.

Conclusion

VII. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Itamochi disclose a portable telephone communications system, which is designed to enable the communications on a portable telephone without requiring two-hand operation, to thereby make driving safer. Further, there is a need for a portable phone communications system which enables caller to turn on the power of remote receiver unit for responding to received call by only one press of the power switch button installed in the remote receiver unit (earphone) which is put over caller's ear, and the power to be turned offer automatically so that no particular power switching operation is required after the communication is over.

Lejman disclose a hands-free car kit allows a mobile handset to enter and exit privacy mode without the user having to press a privacy button. The simple act of picking up the mobile handset out of its cradle switches the hands-free car kit from hands-free mode to privacy

mode. When the mobile handset is installed in the cradle the hands-free car kit enters hands-free mode. If the mobile handset is removed from the cradle the hands-free car kit enters privacy mode.

VII. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is (571) 272-7870. The examiner can normally be reached on M-F. (8:15-4:45).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://portal.uspto.gov/external/portal/pair. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or *EBC@uspto.gov*.

Sharad Rampuria
Examiner
Art Unit 2683

October 21, 2005

GEORGE ENG
PRIMARY EXAMINER